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U.S. PATENT DOCUMENTS									
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		3,948,703	04/06/76	Kushib	e, et al			÷	
		4,305,779	12/15/81	Steeves	, et al	· .			
		4,395,302	07/26/83	Courdu	velis, et al		-	• •	•
		4,430,468	02/07/84	Schuma	icher,			1	
_		4,436,584	03/13/84	Bernac	ki, et al	·			
/		4,632,727	12/30/86	Nelson					
		4,747,907	05/31/88	Acocell	a, et al				
		4,789,648	12/06/88	Chow,	et al		· · · · · · · · · · · · · · · · · · ·	-	
~		4,944,836	07/31/90	Beyer,	et al				
		4,992,135	02/12/91	Doan		••			
		5,225,034	07/06/93	Yu, et a	1 .	·. ·			
				FOREIG	N PATENT DOCUMENTS		•		
	REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	Transla YES	NO NO
~	- 1	EP 0 773 269 A2	11/13/96					·	
	- X	EP 0 659 858 A2	12/14/94						
~	1	EP 0 751 566 A2	06/12/96						
/	- 1	EP 0 777 266 A1	11/13/96						
_	/	EP 0 826 756 A1	08/29/97						
							ate, Pertinent Pag		
~~	T				for Removal of Copper. IF Polishing of Copper Utilizin			1993 TDB V. 37,	No. 10,
	=	V/ "Chenical Mechanical F	olishing of Cop	per with A , et al V-M	mmomium Persulfate." TD IC Conf. June 9, 1986	B V. 37 No.	10. Oct. 1994		
	[]	/ "Tantalum as a diffusio	n barrier betwee	en copper a	and silicon: Failure mechan	ism and effe	ct of nitrogen a	ddtions,"	
~~~	J	Holloway, et al., I. Appl.  "Comparison of High V	Phys. 71 (11) It acuum and Ultr	<u>ine 1, 1992</u> a-high-vac	and silicon: Failure mechan pp5433-44 uum Tantalum Difusion Ba	rrier Perfor	mance Against	Copper	
· ~ ~	<u></u>	Penetration," Clevenger "Initial Study on Coppe	r. et al.J. AppLP er CMP Slurry C	nys 73 (1). Chemistries	Jan. 1. 1993, pp 300-8 ," Carpio, et al, Thin Solid	Films 266 (1	995), pp. 238-4	4 (no ~	vonth)
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				U.S. PATI	ENT DOCUMENTS	th			·
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		5,244,534	09/14/93	Yu, et al				ဥ	ROPRIATE
		5,281,485	01/25/94	Colgan,	et al				S = 2
	<u> </u>	5,340,370	08/23/94	Cadien,	et al			6 U.	181
		5,354,490	10/11/94	Yu, et al				7104 104	7 3
		5,447,887	09/05/95	Filipiak,	Filipiak, et.al				
		5,486,129	01/23/96	Sandhu,	et al				
		5,514,245	05/07/96	Doan, et	al				
		5,516,346 05/14/96		Cadien, et al					
		5,527,423	06/18/96	Neville,	, et al				
		5,575,885	11/19/96	Hirabaya	ashi, et al				
		5,612,254	03/18/97	Mu, et al					
			· · · · · · · · · · · · · · · · · · ·	FOREIGN	PATENT DOCUMENTS	5			
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	- 1	EP 0 826 757 A1	08/29/97						
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		"Chemical Mechanical	Polishing of Cop	per with Oxi	ing Cu Plating on 1a ride and Polymer Inter	films." IBM TU level Dielectrics	BV. 34 No. 7A. "Gutmann, et	Dec. 1991 al, Thin S	olid
,,,,,	= \	"Chemical Mechanical	Polishing of Cop	per in Acidic	Media," Luo, et al, IS	SMIC, Feb 22,19	996		
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INITIAL	ļ						IF ARTIC	OPRIATE
<u></u>		5,614,444	03/25/97	Farkas, et al			T A	3
		5,622,525	04/22/97	Haisma, et al			2. P. C.	7
		5,676,587	10/14/97	Landres, ét al			1046	
		5,698,087	12/16/97	Bokisa, et al			5	
		5,746,947	05/05/98	Vanderpool, et al				, <u>, ,</u>
		5,770,095	06/23/98	Sasaki, et al				
		5,827,781	10/27/98	Skrovan, et al				-
		5,840,629	11/24/98	Carpio	}			
		5,876,490	03/02/99	Ronay				<u>.</u>
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